

Notice of Allowability

Application No.

10/698,103

Examiner

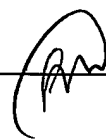
Tarifur R. Chowdhury

Applicant(s)

KUSAFUKA ET AL.

Art Unit

2871



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 08/2/05.
2. ☒ The allowed claim(s) is/are 1-35.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Allowable Subject Matter

1. Claims 1-35 are allowed.
2. The following is an examiner's statement of reasons for allowance:
3. As to claims 1 and 33, the prior arts of record do not anticipate or render obvious to one skilled in the art an image display apparatus comprising various elements as claimed, more specifically the limitations such as pixel electrode, common electrode, switching element, and auxiliary electrode forming an auxiliary capacitance between a portion of the auxiliary electrode and a portion of the pixel electrode formed on the same array substrate and wherein the common electrode adapted to be set at a first electric potential and the auxiliary electrode adapted to be set at a second, different electric potential, are considered novel.
4. As to claim 12, the prior arts of record do not anticipate or render obvious to one skilled in the art an image display apparatus comprising various elements as claimed, more specifically the common electrode adapted to be set at a first electric potential and the auxiliary electrode adapted to be set at a second, different electric potential and a short-circuit detector to detect a source of short circuit wherein the short circuit detector is adapted to produce a first current in response to a short circuit at a first source and to produce second, different current in response to a short circuit at a second source.
5. As to claim 15, the prior arts of record do not anticipate or render obvious to one skilled in the art an image display apparatus comprising various elements as claimed, more specifically the common electrode adapted to be set at a first electric potential and the auxiliary electrode adapted to be set at a second, different electric potential wherein

Art Unit: 2871

an absolute value of a difference value between the second electric potential of the auxiliary electrode and a center electric potential of the signal line is less than an absolute value of a difference value between the center electric potential of the signal line and the first electric potential of the common electrode.

6. As to claim 17, the prior arts of record do not anticipate or render obvious to one skilled in the art an in-plane switching image display apparatus comprising various elements as claimed, more specifically a signal line that has a changing electric potential in relation to a prescribed center electric potential, the signal line to supply the electric potential to the pixel electrode via the switching element, a common electrode electric potential supplying section to supply an electric potential different from the center electric potential to the common electrode and an auxiliary electrode electric potential supplying section to supply an electric potential to the auxiliary electrode such that an absolute value of a difference value from the center electric potential of the signal line is smaller than an absolute value of a difference value between the center electric potential of the signal line and the electric potential supplied by the common electrode potential supplying section.

7. As to claim 18, the prior arts of record do not anticipate or render obvious to one skilled in the art an in-plane switching image display apparatus comprising various elements as claimed a common electrode electric potential supplying section to supply an electric potential to the common electrode, an auxiliary electrode electric potential supplying section to supply an electric potential to the auxiliary electrode, a shunt line connected to the scanning line via the first switching section whose on/off state is

controlled based on an electric potential difference between the shunt line and the scanning line, a second switching section deployed between and the common electrode and the auxiliary electrode that controls a conduction state between the common electrode and the auxiliary electrode and third switching section deployed between the common electrode and the shunt line that controls the conduction state between the common electrode and the shunt line and has electric potential properties different from those of the second switching section.

8. The closest reference USPAT 6,603,525 discloses a liquid crystal display device wherein the storage capacitor electrode and the common electrode are adapted to be set at different potentials. However, the storage capacitor electrode is formed on a separate substrate and thus fails to form auxiliary capacitance between a portion of the auxiliary electrode and a portion of the pixel electrode. Further, JP 59-031928 also discloses that the common electrode is applied with a voltage at any time and the auxiliary electrode is grounded all the time. However, the auxiliary electrode and the common electrode are formed on different substrates. Accordingly, all of the prior art references alone or in combination with any other prior art references fail to teach or suggest the claimed display apparatus.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

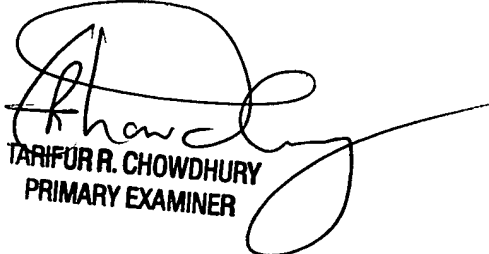
Art Unit: 2871

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R. Chowdhury whose telephone number is (571) 272-2287. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRC
September 03, 2005


TARIFUR R. CHOWDHURY
PRIMARY EXAMINER